



BEST AVAILABLE COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Lutz Rapp
Appl. No.: 09/931,544
Filed: August 16, 2001
Title: METHOD AND ARRANGEMENT FOR COMPENSATING FOR CROSS
PHASE MODULATION
Art Unit: 3663
Examiner: Stephen C. Cunningham
Docket No.: 112740-622

Assistant Commissioner for Patents
Washington, DC 20231

RECEIVED

NOV 2 9 2002

GROUP 3600

11/2/02
Bates
12/19

AMENDMENT

Sir:

In response to the Office Action mailed July 18, 2002, please amend the above-identified application as follows:

In the Specification:

Please amend the paragraph beginning on page 5, line 10 with the following rewritten paragraph:

Figure 3 shows the basic circuit diagram of an XPM compensation arrangement. A wavelength-division multiplex signal WMS is transmitted via a transmission fiber 1 and amplified by a fiber amplifier 6. The input of the fiber amplifier is preceded by an XPM compensation device 5, 3, 4, 2. This contains a phase modulator 2 which is supplied with the wavelength-division multiple signal WMS. The phase modulator is here followed by a measurement transducer or coupler 5 which branches off an optical measurement signal OMS corresponding to the wavelength-division multiplex signal whereas the main component of the energy is supplied to the input of the fiber amplifier 6. The optical measurement signal OMS is initially converted, in an opto-electrical transducer, into an electrical measurement signal EMS which can also be used for control purposes for the amplifier, and is then amplified in an electrical amplifier 4. The control signal SMS generated in this manner controls the phase modulator 2 in such a manner that the cross phase modulation generated in the fiber amplifier 6 is at least almost (pre-) compensated for.